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WATER SUPPLY OUTLOOK FOR ARIZONA

U. S. DEPT. OF AGRICULTURE
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MAY 22 1967

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

CURRENT SERIAL RECORDS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,
SALT RIVER VALLEY WATER USERS ASSOCIATION
and
ARIZONA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with the Federal, State and private organizations listed on the last page of this report.

AS OF
APR. 1, 1967

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season as they affect runoff will add to be an effective average. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data or reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

Listed below are water supply outlook reports based on Federal-State-Private Cooperative snow surveys. Those published by the Soil Conservation Service may be obtained from Soil Conservation Service, Room 507, Federal Building, 701 N. W. Glisan, Portland, Oregon 97209.

PUBLISHED BY SOIL CONSERVATION SERVICE

D. A. WILLIAMS, Administrator

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 507, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85205
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	P. O. Box 38, Boise, Idaho 83701
Montana	P. O. Box 855, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4001 Federal Building, Salt Lake City, Utah 84111
Washington	840 Bon Marche Bldg., Spokane, Washington 99206
Wyoming	P. O. Box 340, Casper, Wyoming 82602

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK
and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS
for
ARIZONA

(Salt, Verde, Gila and Part of Lower Colorado River Basin)

Report prepared by

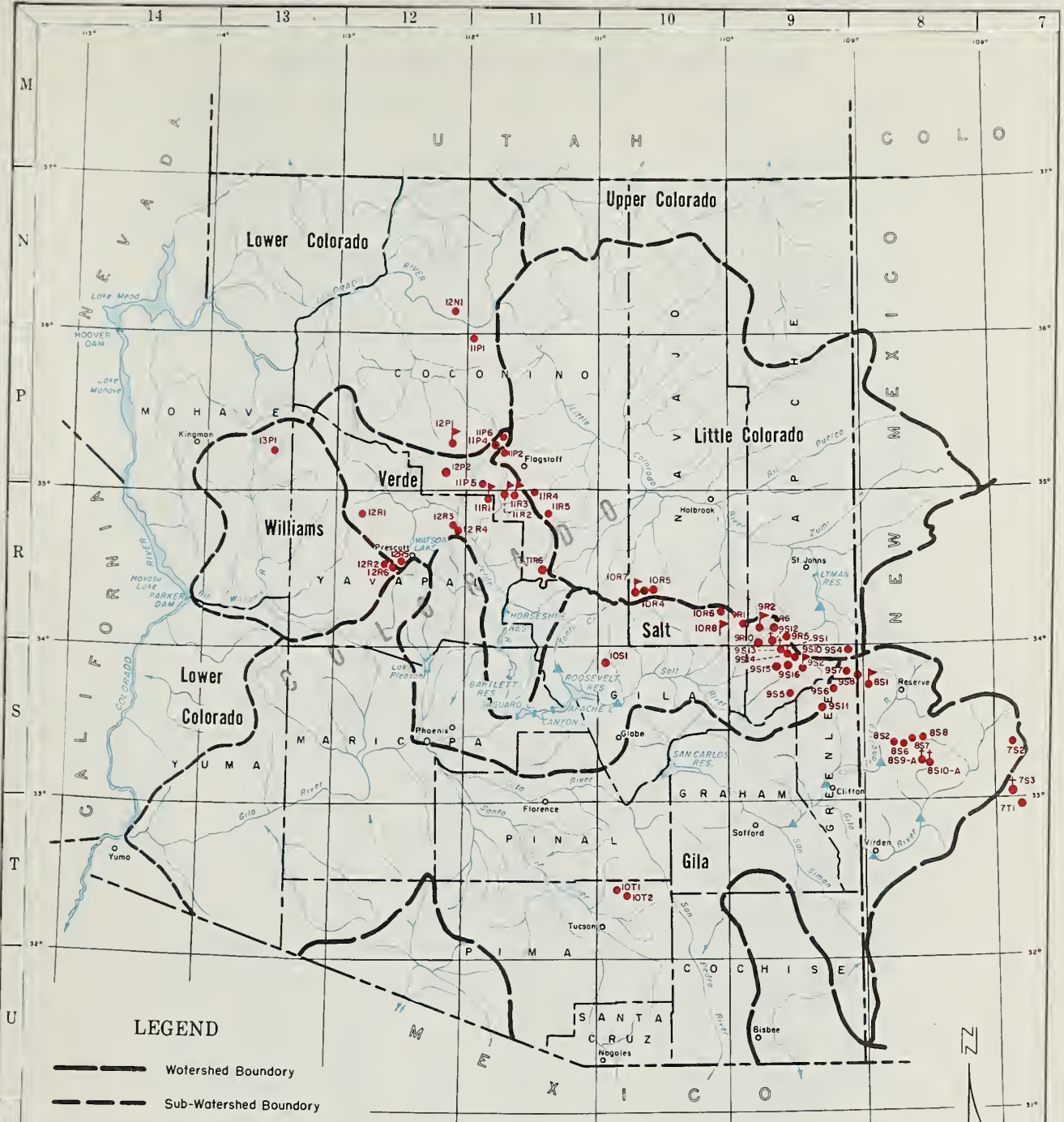
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SOIL CONSERVATION SERVICE

VICTOR I. CORBELL
PRESIDENT
SALT RIVER VALLEY WATER USERS ASSOCIATION





LEGEND

- Watershed Boundary
- Sub-Watershed Boundary
- 13U10 ● Snow Course
- 13U9 ▲ Snow Course and Soil Moisture Station
- 13U8 ▲ Soil Moisture Station Only
- 13U8 † Aerial Marker
- ▲ Forecast Point

ARIZONA
COOPERATIVE SNOW SURVEYS
 Snow Courses and Sub-Watersheds

25 0 25 50 75
 SCALE IN MILES

INDEX to SNOW COURSES and SOIL MOISTURE STATIONS

Number	Name	Sec	Twp	Rge	Elevation	River Basin
11R6	Baker Butte (p)	4	12N	9E	7300	Verde
9S1	Baldy (p)	28	7N	27E	9125	Little Colorado
9S15	Baldy #2	12	6N	26E	10000	Little Colorado
9S16	Baldy #3	13	6N	26E	11000	Little Colorado
10T1	Bear Wallow	6	12S	16E	8100	Gila
9S6	Beaver Head	13	4N	30E	8000	San Francisco
9S10-*	Black River Divide	10	6N	27E	9400	Salt
12N1	Bright Angel	34	33N	3E	8400	Lower Colorado
12R1	Camp Wood	3	16N	6W	5700	Verde
10R7-M	Canyon Creek #2	18	11N	15E	7500	Little Colorado
11R2-M	Casner Park	19	18N	8E	6930	Verde
12P1-M	Chalender	27	22N	3E	7100	Verde
12R6	Copper Basin Divide (p)	23	13N	3W	6720	Verde
10R8-*	Corduoy Creek	4	8N	21E	6000	Salt
9S7	Coronado Trail	26	5N	30E	8000	San Francisco
7T1	Emory Pass	16	16S	9W**	7800	Mimbres
10R6	Forest Dale	2	9N	21E	6430	Salt
11P2	Fort Valley (p)	22	22N	6E	7350	Little Colorado
9R5	Ft. Apache	18	7N	27E	9160	Little Colorado
8S1-M	Frisco Divide	31	6S	20W**	8000	San Francisco
12R4	Gaddes Canyon	11	15N	2E	7600	Verde
10R5	Gentry	36	11N	15E	7650	Salt
11P1	Grand Canyon	21	30N	4E	7500	Lower Colorado
9S11	Hannagan Meadows (p)	19	3N	29E	9090	Salt
11R5	Happy Jack	30	17N	9E	7630	Verde
9R10	Hawley Lake	13	7N	24E	8300	Salt
10R4	Heber (p)	28	11N	15E	7600	Little Colorado
8S9-A	Hummingbird	19	11S	17W**	10550	San Francisco
8S6	Ice King	6	11S	18W**	8020	San Francisco
7S2	Inman	6	11S	10W**	7800	Gila
12R2	Iron Springs	22	14N	3W	6200	Bill Williams
9S2	Maverick Fork (p)	13	6N	27E	9150	Salt
9R2-M	McNary	23	8N	23E	7200	Salt
7S3-A	McKnight Cabin	10	15S	10W**	9300	Mimbres
9R1	Milk Ranch	33	8N	23E	7000	Salt
12R3	Mingus Mountain	3	15N	2E	7100	Verde
8S2	Mogollon	2	11S	19W**	7000	San Francisco
11R4	Mormon Lake	13	18N	8E	7350	Little Colorado
11R3-M	Mormon Mountain (p)	14	18N	8E	7500	Verde
9S12-A	Mt. Ord	4	6N	26E	11000	Salt
11R1-M	Munds Park	7	18N	7E	6500	Verde
11P5-M	Newman Park	25	19N	6E	6750	Verde
9S4	Nutrioso	23	6N	30E	8500	San Francisco
9S5	Pacheta	27	4-1/2N	27E	7800	Salt
8S7	Redstone Trail	5	11S	18W**	8600	San Francisco
10T2	Rose Canyon	15	12S	16E	7300	Gila
8S8	Silver Creek Divide	4	11S	18W**	9000	San Francisco
9S13-A	Smith Cienega #1	10	6N	26E	9700	Salt
9S14-A	Smith Cienega #2	3	6N	26E	9900	Salt
11P4	Snow Bowl #1 (p)	36	23N	6E	10260	Verde
11P6	Snow Bowl #2	31	23N	7E	11000	Verde
9S8	State Line	6	6S	21W**	8000	San Francisco
12R5	White Spar	19	13N	2W	6000	Verde
12P2	Whitehorse Lake	2	20N	2E	7150	Verde
8S10-A	Whitewater	19	11S	17W**	10750	Gila
13P1	Willow Ranch	16	21N	11W	5000	Bill Williams
9R6	Wilson Lake (p)	4	7N	26E	9000	Salt
10S1	Workman Creek	33	6N	14E	6900	Salt

* SOIL MOISTURE STA. ONLY

** NM PRINCIPAL MERIDIAN

M SOIL MOISTURE STA.

(p) STORAGE GAGE

A AERIAL SNOW DEPTH MARKER

ARIZONA WATER SUPPLY OUTLOOK

APRIL 1, 1967

* * * * *
* With seasonal runoff expected to be 1/4 of average, water *
* supplies will be short in areas depending on direct river diver- *
* sions. Reservoir storage, however, is high and the major pro- *
* jects have much better than average supplies of water. *
* * * * *

SNOW COVER

The late March storm deposited 2 to 10" of snow containing 1 to 2" of water on the watersheds of Arizona above 7,000'. Due to warm ground temperature, most of this melted in a few days. Prior to this storm there was virtually no snow below 9,300'. At 11,000' in the White Mts. and on the San Francisco Peaks there is however, 4' of snow with a water content of 15".

PRECIPITATION

March precipitation was highly variable. Some locations received above average precipitation while other stations close by recorded subnormal amounts. Lowest precipitation occurred on the Verde Watershed with amounts between 1/3 and 2/3 of average. Since January 1 all areas have been deficient ranging from 25% to 50% of average.

SOIL MOISTURE

The last storm increased surface soil moisture. Soil moisture is good at the higher elevations on all watersheds, but low at the intermediate and lower elevations.

RESERVOIR STORAGE

Storage in the Salt River Project Reservoirs declined 48,000 acre feet during March due to normal use and low inflow. Nevertheless, reservoir storage on this project is still 77% of capacity and twice average for April 1. San Carlos Reservoir and Lake Pleasant contain 3.5 times their normal amounts. The Colorado River Reservoirs, although less than half full, contain 34% more water than the 1948-62 15-year average.

STREAMFLOW AND WATER SUPPLY

There was a slight rise in streamflow as a result of the late March storm, but total runoff for the month was generally less than 1/3 of average. The April-May streamflow is forecast to be much below average with the Gila River expected to produce 21% the Salt 23% and the Verde 38% of average.

Nineteen per cent below normal runoff is forecast for the Colorado River at inflow to Lake Powell with 6.2 million anticipated.

Water supplies will be adequate in Central Arizona and on other projects having storage facilities. Heavy supplemental pumping will be required in the Upper Gila Valley where surface water supplies will be very short.

STREAM FLOW FORECASTS - APRIL 1, 1967

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature will be near average from the present time to the end of the forecast period. Appreciable deviations from normal of temperature and/or precipitation will correspondingly modify these forecasts.

SUB-WATERSHED, STREAM and STATION	SEASONAL STREAM FLOW IN THOUSANDS OF ACRE FEET					
	FORECAST PERIOD: APRIL - MAY, INCLUSIVE					
	Forecast	Percent	Measured Runoff			1948-62
	Runoff	15-Year				Average
	1967	Average	1966	1965	1964	
Salt River near Roosevelt	33.0	23	283.0	292.4	79.6	144.2
Tonto River near Roosevelt	2.0	25	5.5	44.2	6.7	8.1
Verde River above Horseshoe	19.0	40	26.8	273.8	71.0	48.0
Gila River near Gila	7.3	38	34.6	18.2	8.3	19.0
Gila River near Virden	4.2	21	39.1	17.2	6.0	20.1
Gila River near Solomon	8.0	21	79.0	39.3	10.7	39.0
Frisco River at Clifton	4.6	22	38.1	25.3	6.8	21.1
Frisco River near Glenwood	1.8	19	17.8	10.7	1.5	9.5
Mimbres River near Mimbres	0.3	20	---	0.4	0.6	1.5
Little Colorado River above Lyman Dam (APRIL-JUNE, Incl.)	0.5	7	13.5	16.4	3.7	7.2
Virgin River near Virgin (APRIL-JUNE, Incl.)*	27.0	63	39.0	63.0	37.0	43.0
Virgin River near Littlefield (APRIL-JUNE, Incl.)*	20.0	47	---	63.0	26.0	43.0
*Colorado River--Lake Powell Inflow (APRIL-JULY Incl.) #	6200.0	81	4600.0	11810.05	388.0	7692.0

Granite Creek is forecast to flow 200 acre feet during April-May, not materially changing the storage in Watson Lake.

* Forecast issued by Soil Conservation Service, Salt Lake City, Utah.

Observed flow plus change in storage of upstream reservoirs as compiled by U. S. Bureau of Reclamation.



1967

TOTAL JANUARY-MAY RUNOFF

STREAM and STATION	Measured ^{1/} Runoff	Forecast Runoff	January thru May, Inclusive		
	Jan. -March	April-May	1967	15-Year Average	% of Average
Salt River at Intake	41.4	33.0	74.4	319.1	23
Verde River above Horseshoe	47.4	19.0	66.4	185.8	36
Tonto River above Roosevelt	5.1	2.0	7.1	50.9	14
Gila River nr. Virden	12.7	4.2	16.9	67.8	25
Gila River nr. Solomon	21.5	8.0	29.5	135.3	22
Frisco River at Clifton	10.1	4.6	14.7	68.7	21
Little Colorado River above Lyman Dam (Jan. thru June, Incl.)	1.4 ^{2/}	.5	1.9	9.8	19

^{1/} Provisional stream flow data supplied by Salt River Project and U.S. Geological Survey.

^{2/} Stream flow based partially on change in storage of Lyman Reservoir.



STATUS OF ARIZONA RESERVOIR STORAGE - ABOUT APRIL 1, 1967

SUB- WATERSHED and/or STREAM	RESERVOIR	USABLE	USABLE STORAGE - 1000s ACRE FEET			
		CAPACITY 1000's ACRE FT.	1967	1966	1965	15-Year Average 1948-62
GILA RIVER DRAINAGE						
Agua Fria	Lake Pleasant	157.6	121.5	155.1	34.3	33.9
Granite "	Watson Lake	4.7	3.4	4.6	4.7	---
	Willow Creek	6.1	3.8	6.1	---	---
Gila	San Carlos	1,206.0	276.0	495.4	76.7	84.0
Verde	Bartlett	179.5	127.7	174.1	121.5	79.8
Verde	Horseshoe	142.8	26.7	138.0	50.9	41.3
Salt	Roosevelt	1,382.0	1,073.3	1,343.3	591.3	477.3
Salt	Apache	245.0	243.2	233.6	239.4	211.2
Salt	Canyon	58.0	52.6	53.8	53.9	50.1
Salt	Saguaro	70.0	66.6	51.1	65.4	55.4
COLORADO RIVER DRAINAGE						
Colorado	Lake Havasu	619.4	549.9	559.4	535.1	562.8
Colorado	Lake Mohave	1,810.0	1,677.2	1,734.0	1,665.0	1,564.3 *
Colorado	Lake Mead	27,207.0	15,438.0	15,502.0	11,148.0	16,604.2
Colorado	Lake Powell	25,002.0	7,367.5	8,907.4	6,222.0	---
Little Colo.	Lyman	30.6	17.8	27.7	12.8	8.4
Little Colo.	Show Low Lake	5.1	.5	5.1	4.9	2.2 *

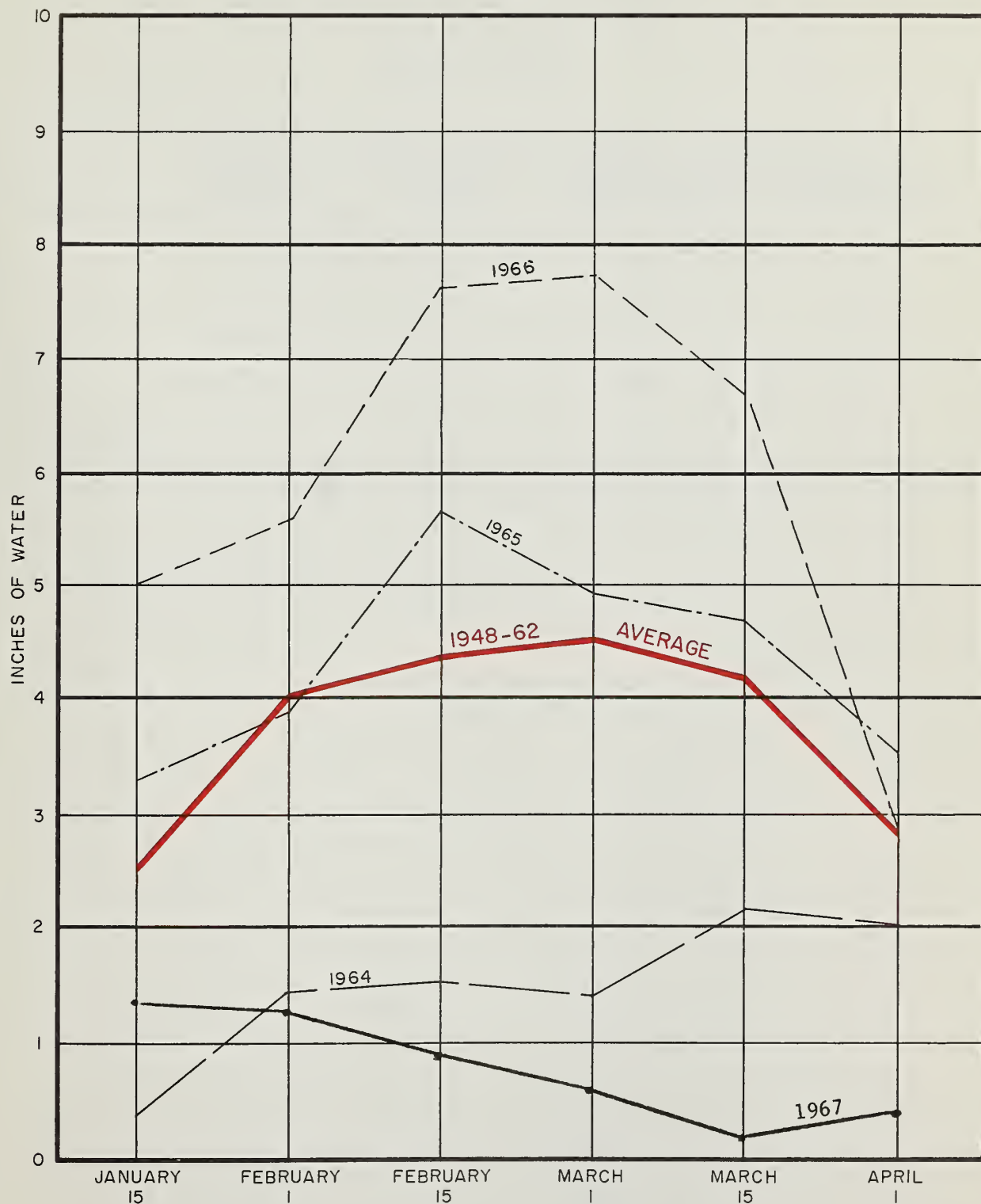
*Average is for less than 15 years of record in the 1948-62 period.

THE HISTORY OF THE UNITED STATES OF AMERICA

CHAPTER I

Year	Event	Location	Significance
1776	Declaration of Independence	Philadelphia	Established the United States as a sovereign nation
1787	Constitution signed	Philadelphia	Established the framework of the federal government
1791	Bill of Rights adopted	Philadelphia	Guaranteed individual liberties
1800	Move to Washington	Washington, D.C.	Established the capital of the new nation
1803	Louisiana Purchase	St. Louis	Doubled the size of the United States
1812	War of 1812	Various locations	Asserted national sovereignty
1820	Missouri Compromise	Washington, D.C.	Resolved the issue of slavery in new territories
1845	Texas Annexation	Washington, D.C.	Expanded the territory of the United States
1848	Treaty of Guadalupe Hidalgo	Guadalupe, Mexico	Acquired California and New Mexico
1850	Compromise of 1850	Washington, D.C.	Resolved territorial disputes
1861	Secession of Southern states	Various locations	Led to the Civil War
1863	Emancipation Proclamation	Washington, D.C.	Declared freedom for slaves in Confederate states
1865	End of Civil War	Various locations	Preserved the Union
1877	Compromise of 1877	Washington, D.C.	Resolved the disputed 1876 election
1890	Wounded Knee Massacre	South Dakota	Marked the end of the Indian Wars
1898	Spanish-American War	Various locations	Established the United States as a world power
1901	Tyler Amendment	Washington, D.C.	Established the process for removing a president
1913	Antitrust Legislation	Washington, D.C.	Regulated big business
1917	World War I	Various locations	Established the United States as a world power
1920	Prohibition	Various locations	Banned alcohol
1929	Stock Market Crash	Wall Street	Led to the Great Depression
1933	New Deal	Washington, D.C.	Addressed the economic crisis
1941	Attack on Pearl Harbor	Hawaii	Entered World War II
1945	End of World War II	Various locations	Established the United States as a superpower
1948	Truman Doctrine	Washington, D.C.	Committed the U.S. to containing communism
1950	McCarthyism	Various locations	Targeted suspected communists
1954	Brown v. Board of Education	Supreme Court	Desegregated schools
1957	First satellite state	Cuba	First communist state in the Western Hemisphere
1960	John F. Kennedy elected	Washington, D.C.	First Catholic president
1963	Civil Rights Movement	Various locations	Challenged segregation
1964	Great Society	Washington, D.C.	Addressed poverty and social issues
1968	Richard Nixon elected	Washington, D.C.	Ended the Vietnam War
1970	Environmental Movement	Various locations	Addressed environmental issues
1973	Watergate Scandal	Washington, D.C.	Led to the resignation of President Nixon
1976	Gerald R. Ford elected	Washington, D.C.	First president to resign
1980	Jimmy Carter elected	Washington, D.C.	First president born in the 20th century
1981	Iranian Hostage Crisis	Washington, D.C.	Challenged Carter's presidency
1982	Reagan elected	Washington, D.C.	First president born in the 20th century
1984	Summer Olympics	Los Angeles	First Olympics in the United States since 1904
1987	Reagan's second term	Washington, D.C.	First president to serve two full terms since Franklin D. Roosevelt
1988	Dubois elected	Washington, D.C.	First president born in the 20th century
1990	Gulf War	Various locations	Established the United States as a world power
1992	Clinton elected	Washington, D.C.	First president born in the 20th century
1994	Clinton's second term	Washington, D.C.	First president to serve two full terms since Franklin D. Roosevelt
1996	Clinton's third term	Washington, D.C.	First president to serve three full terms
1998	Clinton's fourth term	Washington, D.C.	First president to serve four full terms
1999	Clinton's fifth term	Washington, D.C.	First president to serve five full terms
2000	Bush elected	Washington, D.C.	First president born in the 20th century
2001	Bush's first term	Washington, D.C.	First president to serve two full terms since Franklin D. Roosevelt
2003	Iraq War	Various locations	Established the United States as a world power
2004	Bush's second term	Washington, D.C.	First president to serve two full terms since Franklin D. Roosevelt
2005	Bush's third term	Washington, D.C.	First president to serve three full terms
2006	Bush's fourth term	Washington, D.C.	First president to serve four full terms
2007	Bush's fifth term	Washington, D.C.	First president to serve five full terms
2008	Obama elected	Washington, D.C.	First president born in the 20th century
2009	Obama's first term	Washington, D.C.	First president to serve two full terms since Franklin D. Roosevelt
2010	Obama's second term	Washington, D.C.	First president to serve three full terms
2011	Obama's third term	Washington, D.C.	First president to serve four full terms
2012	Obama's fourth term	Washington, D.C.	First president to serve five full terms
2013	Obama's fifth term	Washington, D.C.	First president to serve six full terms
2014	Obama's sixth term	Washington, D.C.	First president to serve seven full terms
2015	Obama's seventh term	Washington, D.C.	First president to serve eight full terms
2016	Obama's eighth term	Washington, D.C.	First president to serve nine full terms
2017	Obama's ninth term	Washington, D.C.	First president to serve ten full terms
2018	Obama's tenth term	Washington, D.C.	First president to serve eleven full terms
2019	Obama's eleventh term	Washington, D.C.	First president to serve twelve full terms
2020	Obama's twelfth term	Washington, D.C.	First president to serve thirteen full terms
2021	Obama's thirteenth term	Washington, D.C.	First president to serve fourteen full terms
2022	Obama's fourteenth term	Washington, D.C.	First president to serve fifteen full terms
2023	Obama's fifteenth term	Washington, D.C.	First president to serve sixteen full terms
2024	Obama's sixteenth term	Washington, D.C.	First president to serve seventeen full terms
2025	Obama's seventeenth term	Washington, D.C.	First president to serve eighteen full terms
2026	Obama's eighteenth term	Washington, D.C.	First president to serve nineteen full terms
2027	Obama's nineteenth term	Washington, D.C.	First president to serve twenty full terms
2028	Obama's twentieth term	Washington, D.C.	First president to serve twenty-one full terms
2029	Obama's twenty-first term	Washington, D.C.	First president to serve twenty-two full terms
2030	Obama's twenty-second term	Washington, D.C.	First president to serve twenty-three full terms
2031	Obama's twenty-third term	Washington, D.C.	First president to serve twenty-four full terms
2032	Obama's twenty-fourth term	Washington, D.C.	First president to serve twenty-five full terms
2033	Obama's twenty-fifth term	Washington, D.C.	First president to serve twenty-six full terms
2034	Obama's twenty-sixth term	Washington, D.C.	First president to serve twenty-seven full terms
2035	Obama's twenty-seventh term	Washington, D.C.	First president to serve twenty-eight full terms
2036	Obama's twenty-eighth term	Washington, D.C.	First president to serve twenty-nine full terms
2037	Obama's twenty-ninth term	Washington, D.C.	First president to serve thirty full terms
2038	Obama's thirtieth term	Washington, D.C.	First president to serve thirty-one full terms
2039	Obama's thirty-first term	Washington, D.C.	First president to serve thirty-two full terms
2040	Obama's thirty-second term	Washington, D.C.	First president to serve thirty-three full terms
2041	Obama's thirty-third term	Washington, D.C.	First president to serve thirty-four full terms
2042	Obama's thirty-fourth term	Washington, D.C.	First president to serve thirty-five full terms
2043	Obama's thirty-fifth term	Washington, D.C.	First president to serve thirty-six full terms
2044	Obama's thirty-sixth term	Washington, D.C.	First president to serve thirty-seven full terms
2045	Obama's thirty-seventh term	Washington, D.C.	First president to serve thirty-eight full terms
2046	Obama's thirty-eighth term	Washington, D.C.	First president to serve thirty-nine full terms
2047	Obama's thirty-ninth term	Washington, D.C.	First president to serve forty full terms
2048	Obama's fortieth term	Washington, D.C.	First president to serve forty-one full terms
2049	Obama's forty-first term	Washington, D.C.	First president to serve forty-two full terms
2050	Obama's forty-second term	Washington, D.C.	First president to serve forty-three full terms
2051	Obama's forty-third term	Washington, D.C.	First president to serve forty-four full terms
2052	Obama's forty-fourth term	Washington, D.C.	First president to serve forty-five full terms
2053	Obama's forty-fifth term	Washington, D.C.	First president to serve forty-six full terms
2054	Obama's forty-sixth term	Washington, D.C.	First president to serve forty-seven full terms
2055	Obama's forty-seventh term	Washington, D.C.	First president to serve forty-eight full terms
2056	Obama's forty-eighth term	Washington, D.C.	First president to serve forty-nine full terms
2057	Obama's forty-ninth term	Washington, D.C.	First president to serve fifty full terms
2058	Obama's fiftieth term	Washington, D.C.	First president to serve fifty-one full terms
2059	Obama's fifty-first term	Washington, D.C.	First president to serve fifty-two full terms
2060	Obama's fifty-second term	Washington, D.C.	First president to serve fifty-three full terms
2061	Obama's fifty-third term	Washington, D.C.	First president to serve fifty-four full terms
2062	Obama's fifty-fourth term	Washington, D.C.	First president to serve fifty-five full terms
2063	Obama's fifty-fifth term	Washington, D.C.	First president to serve fifty-six full terms
2064	Obama's fifty-sixth term	Washington, D.C.	First president to serve fifty-seven full terms
2065	Obama's fifty-seventh term	Washington, D.C.	First president to serve fifty-eight full terms
2066	Obama's fifty-eighth term	Washington, D.C.	First president to serve fifty-nine full terms
2067	Obama's fifty-ninth term	Washington, D.C.	First president to serve sixty full terms
2068	Obama's sixtieth term	Washington, D.C.	First president to serve sixty-one full terms
2069	Obama's sixty-first term	Washington, D.C.	First president to serve sixty-two full terms
2070	Obama's sixty-second term	Washington, D.C.	First president to serve sixty-three full terms
2071	Obama's sixty-third term	Washington, D.C.	First president to serve sixty-four full terms
2072	Obama's sixty-fourth term	Washington, D.C.	First president to serve sixty-five full terms
2073	Obama's sixty-fifth term	Washington, D.C.	First president to serve sixty-six full terms
2074	Obama's sixty-sixth term	Washington, D.C.	First president to serve sixty-seven full terms
2075	Obama's sixty-seventh term	Washington, D.C.	First president to serve sixty-eight full terms
2076	Obama's sixty-eighth term	Washington, D.C.	First president to serve sixty-nine full terms
2077	Obama's sixty-ninth term	Washington, D.C.	First president to serve seventy full terms
2078	Obama's seventieth term	Washington, D.C.	First president to serve seventy-one full terms
2079	Obama's seventy-first term	Washington, D.C.	First president to serve seventy-two full terms
2080	Obama's seventy-second term	Washington, D.C.	First president to serve seventy-three full terms
2081	Obama's seventy-third term	Washington, D.C.	First president to serve seventy-four full terms
2082	Obama's seventy-fourth term	Washington, D.C.	First president to serve seventy-five full terms
2083	Obama's seventy-fifth term	Washington, D.C.	First president to serve seventy-six full terms
2084	Obama's seventy-sixth term	Washington, D.C.	First president to serve seventy-seven full terms
2085	Obama's seventy-seventh term	Washington, D.C.	First president to serve seventy-eight full terms
2086	Obama's seventy-eighth term	Washington, D.C.	First president to serve seventy-nine full terms
2087	Obama's seventy-ninth term	Washington, D.C.	First president to serve eighty full terms
2088	Obama's eightieth term	Washington, D.C.	First president to serve eighty-one full terms
2089	Obama's eighty-first term	Washington, D.C.	First president to serve eighty-two full terms
2090	Obama's eighty-second term	Washington, D.C.	First president to serve eighty-three full terms
2091	Obama's eighty-third term	Washington, D.C.	First president to serve eighty-four full terms
2092	Obama's eighty-fourth term	Washington, D.C.	First president to serve eighty-five full terms
2093	Obama's eighty-fifth term	Washington, D.C.	First president to serve eighty-six full terms
2094	Obama's eighty-sixth term	Washington, D.C.	First president to serve eighty-seven full terms
2095	Obama's eighty-seventh term	Washington, D.C.	First president to serve eighty-eight full terms
2096	Obama's eighty-eighth term	Washington, D.C.	First president to serve eighty-nine full terms
2097	Obama's eighty-ninth term	Washington, D.C.	First president to serve ninety full terms
2098	Obama's ninetieth term	Washington, D.C.	First president to serve ninety-one full terms
2099	Obama's ninety-first term	Washington, D.C.	First president to serve ninety-two full terms
2100	Obama's ninety-second term	Washington, D.C.	First president to serve ninety-three full terms
2101	Obama's ninety-third term	Washington, D.C.	First president to serve ninety-four full terms
2102	Obama's ninety-fourth term	Washington, D.C.	First president to serve ninety-five full terms
2103	Obama's ninety-fifth term	Washington, D.C.	First president to serve ninety-six full terms
2104	Obama's ninety-sixth term	Washington, D.C.	First president to serve ninety-seven full terms
2105	Obama's ninety-seventh term	Washington, D.C.	First president to serve ninety-eight full terms
2106	Obama's ninety-eighth term	Washington, D.C.	First president to serve ninety-nine full terms
2107	Obama's ninety-ninth term	Washington, D.C.	First president to serve one hundred full terms
2108	Obama's one hundredth term	Washington, D.C.	First president to serve one hundred and one full terms
2109	Obama's one hundred and first term	Washington, D.C.	First president to serve one hundred and two full terms
2110	Obama's one hundred and second term	Washington, D.C.	First president to serve one hundred and three full terms
2111	Obama's one hundred and third term	Washington, D.C.	First president to serve one hundred and four full terms
2112	Obama's one hundred and fourth term	Washington, D.C.	First president to serve one hundred and five full terms
2113	Obama's one hundred and fifth term	Washington, D.C.	First president to serve one hundred and six full terms
2114	Obama's one hundred and sixth term	Washington, D.C.	First president to serve one hundred and seven full terms
2115	Obama's one hundred and seventh term	Washington, D.C.	First president to serve one hundred and eight full terms
2116	Obama's one hundred and eighth term	Washington, D.C.	First president to serve one hundred and nine full terms
2117	Obama's one hundred and ninth term	Washington, D.C.	First president to serve one hundred and ten full terms
2118	Obama's one hundred and tenth term	Washington, D.C.	First president to serve one hundred and eleven full terms
2119	Obama's one hundred and eleventh term	Washington, D.C.	First president to serve one hundred and twelve full terms
2120	Obama's one hundred and twelfth term	Washington, D.C.	First president to serve one hundred and thirteen full terms
2121	Obama's one hundred and thirteenth term	Washington, D.C.	First president to serve one hundred and fourteen full terms
2122	Obama's one hundred and fourteenth term	Washington, D.C.	First president to serve one hundred and fifteen full terms
2123	Obama's one hundred and fifteenth term	Washington, D.C.	First president to serve one hundred and sixteen full terms
2124	Obama's one hundred and sixteenth term	Washington, D.C.	First president to serve one hundred and seventeen full terms
2125	Obama's one hundred and seventeenth term	Washington, D.C.	First president to serve one hundred and eighteen full terms
2126	Obama's one hundred and eighteenth term	Washington, D.C.	First president to serve one hundred and nineteen full terms
2127	Obama's one hundred and nineteenth term	Washington, D.C.	First president to serve one hundred and twenty full terms
2128	Obama's one hundred and twentieth term	Washington, D.C.	First president to serve one hundred and twenty-one full terms
2129	Obama's one hundred and twenty-first term	Washington, D.C.	First president to serve one hundred and twenty-two full terms
2130	Obama's one hundred and twenty-second term	Washington, D.C.	First president to serve one hundred and twenty-three full terms
2131	Obama's one hundred and twenty-third term	Washington, D.C.	First president to serve one hundred and twenty-four full terms
2132	Obama's one hundred and twenty-fourth term	Washington, D.C.	First president to serve one hundred and twenty-five full terms
2133	Obama's one hundred and twenty-fifth term	Washington, D.C.	First president to serve one hundred and twenty-six full terms
2134	Obama's one hundred and twenty-sixth term	Washington, D.C.	First president to serve one hundred and twenty-seven full terms
2135	Obama's one hundred and twenty-seventh term	Washington, D.C.	First president to serve one hundred and twenty-eight full terms
2136	Obama's one hundred and twenty-eighth term	Washington, D.C.	First president to serve one hundred and twenty-nine full terms
2137	Obama's one hundred and twenty-ninth term	Washington, D.C.	First president to serve one hundred and thirty full terms
2138	Obama's one hundred and thirtieth term	Washington, D.C.	First president to serve one hundred and thirty-one full terms
2139	Obama's one hundred and thirty-first term	Washington, D.C.	First president to serve one hundred and thirty-two full terms
2140	Obama's one hundred and thirty-second term	Washington, D.C.	First president to serve one hundred and thirty-three full terms
2141	Obama's one hundred and thirty-third term	Washington, D.C.	First president to serve one hundred and thirty-four full terms
2142	Obama's one hundred and thirty-fourth term	Washington, D.C.	First president to serve one hundred and thirty-five full terms
2143	Obama's one hundred and thirty-fifth term	Washington, D.C.	First president to serve one hundred and thirty-six full terms
2144	Obama's one hundred and thirty-sixth term	Washington, D.C.	First president to serve one hundred and thirty-seven full terms
2145	Obama's one hundred and thirty-seventh term	Washington, D.C.	First president to serve one hundred and thirty-eight full terms
2146	Obama's one hundred and thirty-eighth term	Washington, D.C.	First president to serve one hundred and thirty-nine full terms
2147	Obama's one hundred and thirty-ninth term	Washington, D.C.	First president to serve one hundred and forty full terms
2148	Obama's one hundred and fortieth term	Washington, D.C.	First president to serve one hundred and forty-one full terms
2149	Obama's one hundred and forty-first term	Washington, D.C.	First president to serve one hundred and forty-two full terms
2150	Obama's one hundred and forty-second term	Washington, D.C.	First president to serve one hundred and forty-three full terms
2151	Obama's one hundred and forty-third term	Washington, D.C.	First president to serve one hundred and forty-four full terms
2152	Obama's one hundred and forty-fourth term	Washington, D.C.	First president to serve one hundred and forty-five full terms
2153	Obama's one hundred and forty-fifth term	Washington, D.C.	First president to serve one hundred and forty-six full terms
2154	Obama's one hundred and forty-sixth term	Washington, D.C.	First president to serve one hundred and forty-seven full terms
2155	Obama's one hundred and forty-seventh term	Washington, D.C.	First president to serve one hundred and forty-eight full terms
2156	Obama's one hundred and forty-eighth term	Washington, D.C.	First president to serve one hundred and forty-nine full terms
2157	Obama's one hundred and forty-ninth term	Washington, D.C.	First president to serve one hundred and fifty full terms
2158	Obama's one hundred and fiftieth term	Washington, D.C.	First president to serve one hundred and fifty-one full terms
2159	Obama's one hundred and fifty-first term	Washington, D.C.	First president to serve one hundred and fifty-two full terms
2160	Obama's one hundred and fifty-second term	Washington, D.C.	First president to serve one hundred and fifty-three full terms
2161	Obama's one hundred and fifty-third term	Washington, D.C.	First president to serve one hundred and fifty-four full terms
2162	Obama's one hundred and fifty-fourth term	Washington, D.C.	First president to serve one hundred and fifty-five full terms
2163	Obama's one hundred and fifty-fifth term	Washington, D.C.	First president to serve one hundred and fifty-six full terms
2164	Obama's one hundred and fifty-sixth term	Washington, D.C.	First president to serve one hundred and fifty-seven full terms
2165	Obama's one hundred and fifty-seventh term	Washington, D.C.	First president to serve one hundred and fifty-eight full terms
2166	Obama's one hundred and fifty-eighth term	Washington, D.C.	First president to serve one hundred and fifty-nine full terms
2167	Obama's one hundred and fifty-ninth term	Washington, D.C.	First president to serve one hundred and sixty full terms
2168	Obama's one hundred and sixtieth term	Washington, D.C.	First president to serve one hundred and sixty-one full terms
2169	Obama's one hundred and sixty-first term	Washington, D.C.	First president to serve one hundred and sixty-two full terms
2170	Obama's one hundred and sixty-second term	Washington, D.C.	First president to serve one hundred and sixty-three full terms
2171	Obama's one hundred and sixty-third term	Washington, D.C.	First president to serve one hundred and sixty-four full terms
2172	Obama's one hundred and sixty-fourth term	Washington, D.C.	First president to serve one hundred and sixty-five full terms
2173	Obama's one hundred and sixty-fifth term	Washington, D.C.	First president to serve one hundred and sixty-six full terms
2174	Obama's one hundred and sixty-sixth term	Washington, D.C.	First president to serve one hundred and sixty-seven full terms
2175	Obama's one hundred and sixty-seventh term	Washington, D.C.	First president to serve one hundred and sixty-eight full terms
2176	Obama's one hundred and sixty-eighth term	Washington, D.C.	First president to serve one hundred and sixty-nine full terms
2177	Obama's one hundred and sixty-ninth term	Washington, D.C.	First president to serve one hundred and seventy full terms
2178	Obama's one hundred and seventieth term	Washington, D.C.	First president to serve one hundred and seventy-one full terms
2179	Obama's one hundred and seventy-first term	Washington, D.C.	First president to serve one hundred and seventy-two full terms
2180	Obama's one hundred and seventy-second term	Washington, D.C.	First president to serve one hundred and seventy-three full terms
2181	Obama's one hundred and seventy-third term	Washington, D.C.	First president to serve one hundred and seventy-four full terms
2182	Obama's one hundred and seventy-fourth term	Washington, D.C.	First president to serve one hundred and seventy-five full terms
2183	Obama's one hundred and seventy-fifth term	Washington, D.C.	First president to serve one hundred and seventy-six full terms
2184	Obama's one hundred and seventy-sixth term	Washington, D.C.	First president to serve one hundred and seventy-seven full terms
2185	Obama's one hundred and seventy-seventh term	Washington, D.C.	First president to serve one hundred and seventy-eight full terms
2186	Obama's one hundred and seventy-eighth term	Washington, D.C.	First president to serve one hundred and seventy-nine full terms
2187	Obama's one hundred and seventy-ninth term	Washington, D.C.	First president to serve one hundred and eighty full terms
2188	Obama's one hundred and eightieth term	Washington, D.C.	First president to serve one hundred and eighty-one full terms
2189	Obama's one hundred and eighty-first term	Washington, D.C.	First president to serve one hundred and eighty-two full terms
2190	Obama's one hundred and eighty-second term	Washington, D.C.	First president to serve one hundred and eighty-three full terms
2191	Obama's one hundred and eighty-third term	Washington, D.C.	First president to serve one hundred and eighty-four full terms
2192	Obama's one hundred and eighty-fourth term	Washington, D.C.	First president to serve one hundred and eighty-five full terms
2193	Obama's one hundred and eighty-fifth term	Washington, D.C.	First president to serve one hundred and eighty-six full terms
2194	Obama's one hundred and eighty-sixth term	Washington, D.C.	First president to serve one hundred and eighty-seven full terms
2195	Obama's one hundred and eighty-seventh term	Washington, D.C.	First president to serve one hundred and eighty-eight full terms
2196	Obama's one hundred and eighty-eighth term	Washington, D.C.	First president to serve one hundred and eighty-nine full terms
2197	Obama's one hundred and eighty-ninth term	Washington, D.C.	First president to serve one hundred and ninety full terms
2198	Obama's one hundred and ninetieth term	Washington, D.C.	First president to serve one hundred and ninety-one full terms
2199	Obama's one hundred and ninety-first term	Washington, D.C.	First president to serve one hundred and ninety-two full terms
2200	Obama's one hundred and ninety-second term	Washington, D.C.	First president to serve one hundred and ninety-three full terms
2201	Obama's one hundred and ninety-third term	Washington, D.C.	First president to serve one hundred and ninety-four full terms
2202	Obama's one hundred and ninety-fourth term	Washington, D.C.	First president to serve one hundred and ninety-five full terms
2203	Obama's one hundred and ninety-fifth term	Washington, D.C.	First president to serve one hundred and ninety-six full terms
2204			

RELATIVE SNOW WATER ACCUMULATION ARIZONA 1967



This graph represents the average snow water content on eleven selected snow courses on Arizona Sub-Watersheds.

SNOW COVER ON ARIZONA WATERSHEDS

APRIL 1, 1967

Watershed	No. of Courses Average	Water Content of Snow (Inches)	This Year's Water Content of	
			<u>Snow Expressed as Percent of:</u> Last Year	<u>Average *</u>
Gila	7	.0	0	0
Salt	10	.4	12	13
Verde	7	.5	88	19
Little Colorado	4	.3	7	8

* Actual or Estimated 1948-62, 15-Year Average

THE UNIVERSITY OF CHICAGO

1961

1962

1963

1964

1965

1966

1967

1968

1969

1970

1971

1972

1973

1974

1975

1976

1977

1978

1979

1980

1981

1982

1983

1984

1985

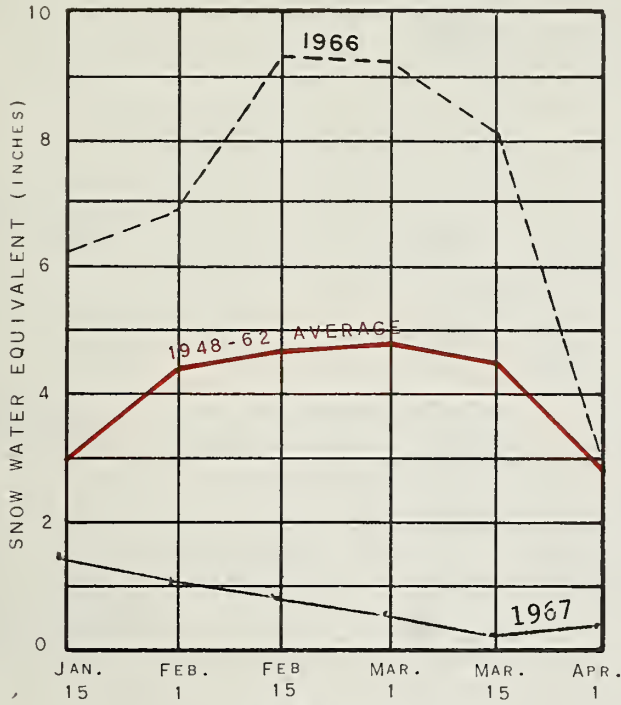
1986

1987

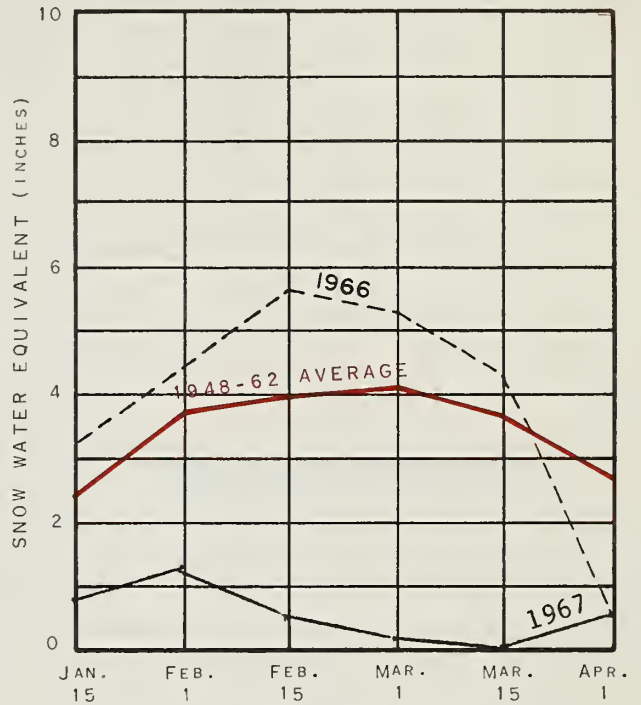
1967

ARIZONA SNOW COVER

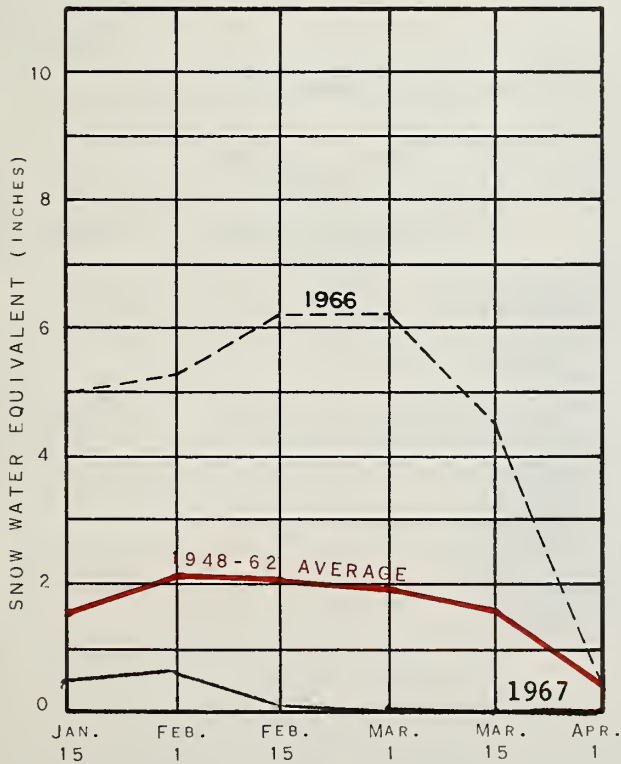
BY WATERSHEDS



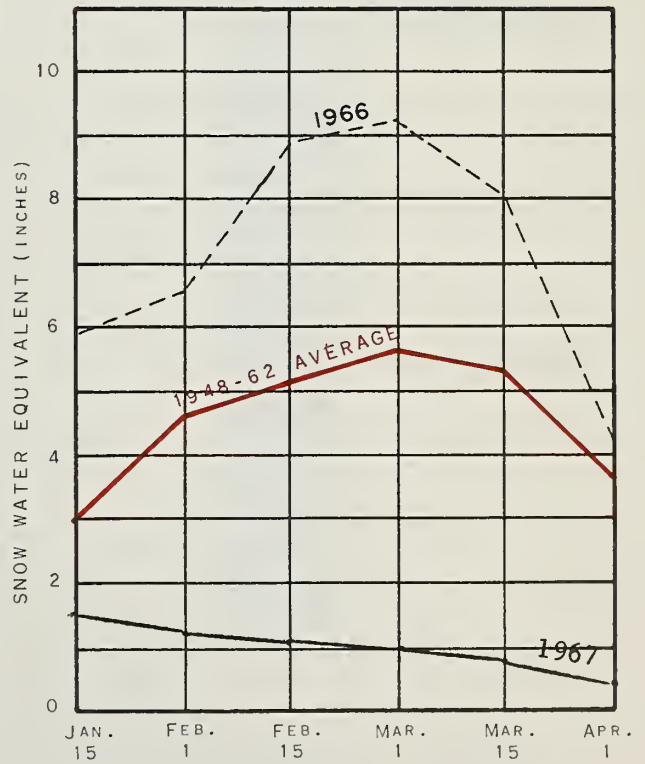
SALT RIVER



VERDE RIVER



GILA RIVER

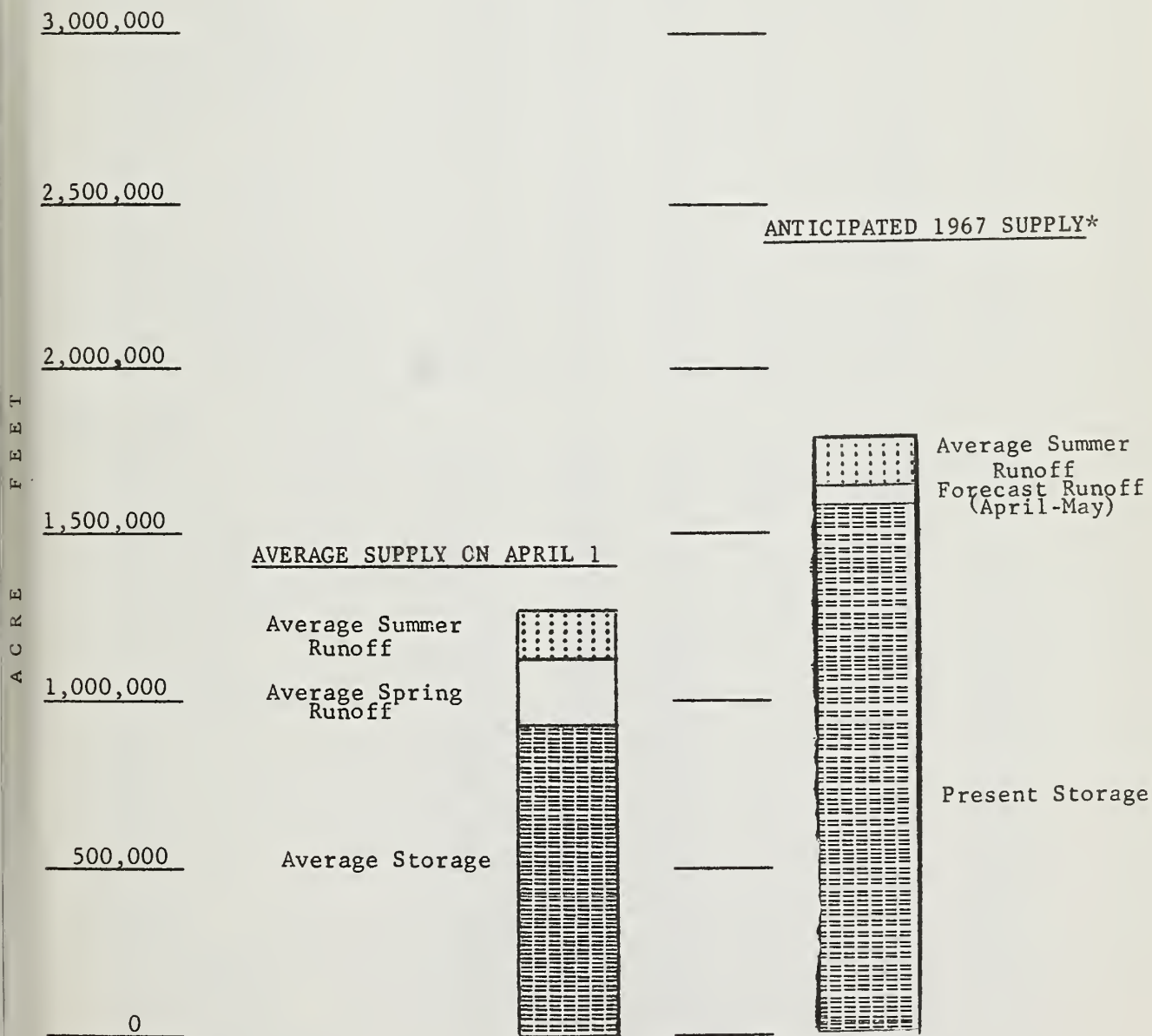


LITTLE COLORADO RIVER

BASED ON SELECTED SNOW SURVEY COURSES



WATER SUPPLY INVENTORY
SALT RIVER VALLEY SYSTEM
APRIL 1, 1967



* Based on Present Storage + Forecast Spring Runoff + Average Summer runoff

THE
HISTORY OF
THE
CITY OF
NEW-YORK
FROM
1624 TO 1824



SNOWABOUT APRIL 1, 1967

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a

GILA RIVER

Bear Wallow	10T1	8100	3/30	1	0.3	8.9	1.8
Beaver Head	9S6	8000	3/31	0	0.0	2.1	1.2
Coronado Trail	9S7	8000	3/31	0	0.0	0.0	1.1
Crazy Horse (A)	9T2-A	10200	---	---	---	---	---
Emory Pass #1 *	7T1	7800	3/30	0	0.0	---	---
Emory Pass #2 *	7T2	7800	3/30	0	0.0	---	---
Frisco Divide	8S1-M	8000	3/31	0	0.0	T	0.7
Hannagan Meadows *	9S11	9090	3/31	4	0.7	14.4	---
High Peak (A)	9T1-A	10600	---	---	---	---	---
Hummingbird (A)	8S9-A	10550	3/31	19	4.7	30.0	---
Ice King	8S6	8020	3/31	1	0.4	6.5	---
Inman	7S2	7800	3/31	0	0.0	0.0	0.0
McKnight Cabin *	7S3	9300	3/30	1	0.3	---	---
Mogollon	8S2	7000	3/31	0	0.0	T	0.3 **
Nutrioso	9S4	8500	3/31	0	0.0	0.0	0.6
Redstone Trail	8S7	8600	3/31	4	0.7	10.9	---
Rose Canyon	10T2	7300	3/30	0	0.0	0.2	0.6
Silver Creek Divide	8S8	9000	3/31	11	2.7	19.0	---
State Line	9S8	8000	3/31	0	0.0	0.0	0.4
Whitewater (A)	8S10-A	10750	3/31	38	11.4	34.5	---

SALT RIVER

Baldy *	9S1	9125	3/31	5	0.7	8.6	6.1**
Baldy #2 *	9S15	9750	3/22	28	10.3	19.0	---
Baldy #3 *	9S16	10950	3/22	42	13.8	35.8	---
Beaver Head	9S6	8000	3/31	0	0.0	2.1	1.2
Canyon Creek	10R7-M	7500	3/31	2	0.4	0.0	1.1 **
Canyon Point	10R8	7600	3/31	3	0.6	---	---
Coronado Trail	9S7	8000	3/31	0	0.0	0.0	1.1
Forest Dale	10R6	6430	3/31	0	0.0	0.0	0.0
Ft. Apache	9R5	9160	3/31	5	0.5	8.2	7.6 **
Hannagan Meadows	9S11	9090	3/31	4	0.7	14.4	---
Hawley Lake	9R10	8300	3/31	5	1.0	0.7	---
Heber	10R4	7600	3/31	2	0.3	0.0	1.3 **
Maverick Fork	9S2	9050	3/31	9	1.2	11.2	8.2 **
McNary	9R2-M	7200	3/31	0	0.0	0.0	0.4
Milk Ranch	9R1	7000	3/31	0	0.0	0.0	0.0
Mt. Ord (A)	9S12-A	11000	3/23	45	13.9	35.2	---
Nutrioso *	9S4	8500	3/31	0	0.0	0.0	0.6
Pacheta	9S5	7800	3/31	0	0.0	0.0	1.0 **
Smith Cienega (A)	9S14-A	9850	3/23	35	11.9	20.7	---
Wilson Lake	9R6	9100	3/31	6	0.8	8.5	---
Workman Creek	10S1	6900	3/31	4	0.8	0.0	2.2 **

BILL WILLIAMS RIVER

Camp Wood *	12R1	5700	3/31	0	0.0	0.0	0.0
Copper Basin Divide	12R6	6720	3/31	0	0.0	0.0	---
Iron Springs	12R2	6200	3/31	0	0.0	0.0	0.0
Willow Ranch	13P1	5000	3/31	0	0.0	0.0	0.0

(a) 1948-62, 15 year period. (*) Adjacent drainage. (**) 1948-62 Adjusted Average. (A) Aerial observation: Water content estimated.



SNOW ABOUT APRIL 1, 1967

DRAINAGE BASIN and SNOW COURSE			CURRENT INFORMATION			PAST RECORD	
			DATE OF SURVEY	SNOW DEPTH (Inches)	WATER CONTENT (Inches)	WATER CONTENT (Inches)	
NAME	NO.	ELEVATION				LAST YEAR	AVERAGE ^a
VERDE RIVER							
Baker Butte	11R6	7300	3/31	2	0.6	3.7	---
Camp Wood	12R1	5700	3/31	0	0.0	0.0	0.0
Chalender	12P1-M	7100	3/30	4	1.2	0.0	1.5
Copper Basin Divide	12R6	6720	3/31	0	0.0	0.0	---
Fort Valley	11P2	7350	3/31	4	0.4	0.0	1.4
Gaddes Canyon	12R4	7600	3/31	1	0.2	3.2	5.2 **
Happy Jack	11R5	7630	3/31	4	0.9	0.0	2.6 **
Iron Springs *	12R2	6200	3/31	0	0.0	0.0	0.0
Mingus Mountain	12R3	7100	3/31	0	0.0	0.0	0.1
Mormon Lake *	11R4	7350	3/31	3	0.7	T	3.3
Mormon Mountain	11R3-M	7500	3/31	5	0.9	0.9	4.9 **
Munds Park	11R1-M	6500	3/31	0	0.0	0.0	1.1 **
Newman Park	11P5-M	6750	3/31	0	0.0	0.0	---
Snow Bowl #1	11P4	10260	3/31	20	7.0	12.6	---
Snow Bowl #2	11P6	11200	3/31	50	15.6	23.8	---
White Spar	12R5	6000	3/31	0	0.0	0.0	---
White Horse Lake Jct.	12P2	7180	3/30	5	0.6	---	---
LOWER COLORADO RIVER							
Bill Williams Summit	12P4	8950	3/30	16	5.1	---	---
Bill " Intermediate	12P5	8550	3/30	9	1.3	---	---
Bright Angel	12N1	8400	---	---	---	---	3.3 **
Chalender *	12P1-M	7100	3/30	4	1.2	0.0	1.5
Fort Valley	11P2	7350	3/31	4	0.6	0.0	1.4
Grand Canyon	11P1	7500	3/31	1	0.2	0.0	1.1
Williams Ski Run	12P3	7720	3/30	8	1.2	---	---
LITTLE COLORADO RIVER							
Baldy	9S1	9125	3/31	5	0.7	8.6	6.1 **
Baldy #2	9S15	9750	3/22	28	10.3	19.0	---
Baldy #3	9S16	10950	3/22	42	13.8	35.8	---
Canyon Creek	10R7-M	7500	3/31	2	0.4	0.0	1.1 **
Canyon Point	10R8	7600	3/31	3	0.6	---	---
Forest Dale	10R6	6430	3/31	0	0.0	0.0	0.0
Fort Apache	9R5	9160	3/31	5	0.5	8.2	7.6 **
Fort Valley	11P2	7350	3/31	4	0.6	0.0	1.4
Happy Jack *	11R5	7630	3/31	4	0.9	0.0	2.6 **
Heber	10R4	7600	3/31	2	0.3	0.0	1.3 **
McNary	9R2-M	7200	3/31	0	0.0	0.0	0.4
Mormon Lake	11R4	7350	3/31	3	0.7	T	3.3
Mormon Mountain	11R3-M	7500	3/31	5	0.9	0.9	4.9 **
Nutrioso	9S4	8500	3/31	0	0.0	0.0	0.6
Snow Bowl #1	11P4	10260	3/30	20	7.0	12.6	---
Snow Bowl #2	11P6	11200	3/30	50	15.6	23.8	---
Wilson Lake *	9R6	9100	3/31	6	0.8	8.5	---

(a) 1948-62, 15 year period. (*) Adjacent drainage. (**) 1948-62 Adjusted Average. (A) Aerial observation: Water content estimated.

PRECIPITATION

STORAGE GAGE DATA - ABOUT APRIL 1, 1967

Drainage Basin and Storage Gage	Elev.	Current Data		1948-62	From Approx. 11/1 to Date		
		Date of Reading	March Precip.	Av. March Precip.	This Year	1948-62 Average	% of Average
<u>GILA RIVER</u>							
Silver Creek Divide	9000	3/31	2.10	---	8.60	---	---
Hannagan Meadows	9030	3/31	2.24	3.37*	9.08	13.90*	58
<u>SALT RIVER</u>							
Canyon Point	7600	3/31	3.36	---	15.31	---	---
Hannagan Meadows	9030	3/31	2.24	3.37*	9.08	13.90*	58
Little Wildcat	7600	3/31	2.85	3.20*	11.12	14.17*	78
(Heber Snow Course)							
Maverick Fork	9050	3/31	3.30	2.97*	9.47	12.18*	78
Workman Creek **	6970	3/30	2.57	3.66	13.83	17.20	80
Wilson Lake	9100	3/31	2.35	---	7.56	---	---
<u>VERDE RIVER</u>							
Baker Butte	7300	3/31	1.86	---	12.40	---	---
Copper Basin Divide	6720	3/31	.93	---	8.89	---	---
Fort Valley **	7350	3/31	1.05	1.84	9.93	9.00	110
Happy Jack **	7480	3/31	1.10	2.67*	8.49	11.82*	72
Mingus Mountain	7660	3/31	.74	2.11	4.94	10.11	49
Mormon Mountain	7500	3/31	1.74	---	21.19	---	---
<u>LITTLE COLORADO</u>							
Sheep Crossing	9125	3/31	2.80	2.53*	8.43	10.88*	77
(Baldy Snow Course)							
Little Wildcat	7600	3/31	2.85	3.20*	11.12	14.17*	78
(Heber Snow Course)							

* 1948-62 Adjusted Average

** Data supplied by U.S. Forest Service



ARIZONA SOIL MOISTURE - ABOUT APRIL 1, 1967

Drainage Basin and Station	<u>1/</u> Station Number	Elev.	Soil Profile in Inches		Date	Soil Moisture Content in Inches			
			Depth	Cap.		1967	Past Record		Avg.
							1966	1965	

GILA RIVER

Frisco Divide	8S1-M	8000	48	13.3	3/31	11.2	12.6	11.8	11.7
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SALT RIVER

Black River Divide	9S10-*	9100	48	16.8	3/31	17.9	18.1	17.9	15.9
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Canyon Creek	10R7-M	7500	48	18.3	3/31	18.8	18.4	14.7	14.5
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Corduroy Creek	10R8-*	6000	36	13.5	3/24	9.8	12.3	10.2	8.8
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McNary	9R2-M	7200	48	16.3	3/24	16.0	17.9	17.9	14.8
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VERDE RIVER

Mormon Mountain	11R3-M	7500	48	16.1	3/31	17.8	17.7	17.7	16.2
-----------------	--------	------	----	------	------	------	------	------	------

Newman Park	11P5-M	6750	36	17.7	3/31	19.5	19.5	19.5	17.2
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1/ * - Soil Moisture Station Only

M - Snow Course and Soil Moisture Station

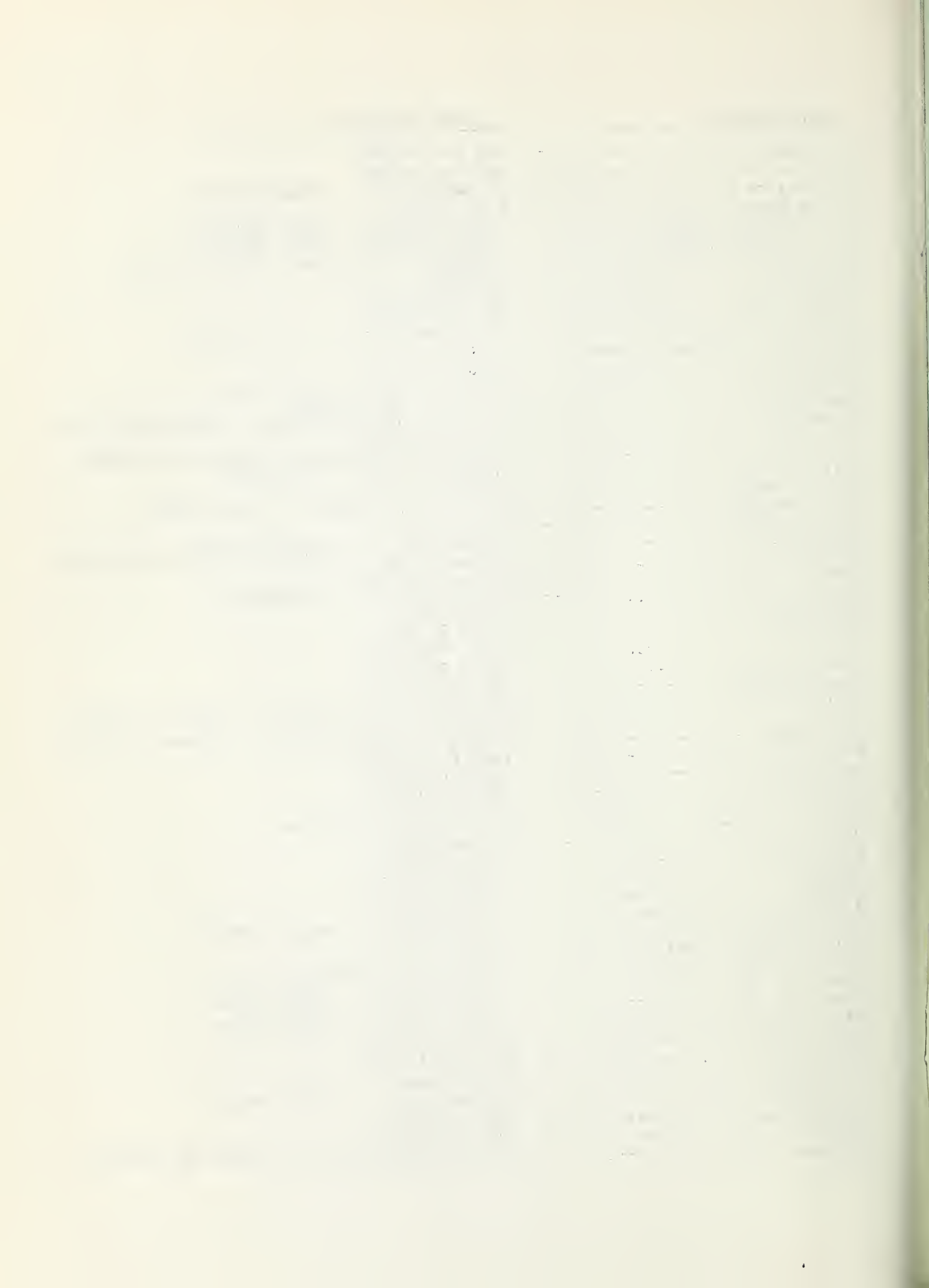


SNOW COURSE

Baker Butte -----
 Baldy -----
 Bear Wallow -----
 Beaver Head -----
 Bill Williams Intermediate ----
 Bill Williams Summit -----
 Bright Angel -----
 Camp Wood -----
 Canyon Creek -----
 Canyon Point -----
 Chalender -----
 Copper Basin Divide -----
 Coronado Trail -----
 Crazy Horse -----
 Emory Pass -----
 Forest Dale -----
 Ft. Apache -----
 Fort Valley -----
 Frisco Divide -----
 Gaddes Canyon -----
 Grand Canyon -----
 Hannagan Meadows -----
 Happy Jack -----
 Hawley Lake -----
 Heber -----
 High Peak -----
 Hummingbird -----
 Ice King -----
 Inman -----
 Iron Springs -----
 Maverick Fork -----
 McKnight Cabin -----
 McNary -----
 Milk Ranch -----
 Mingus Mountain -----
 Mogollon -----
 Mormon Lake -----
 Mormon Mountain -----
 Mt. Ord -----
 Munds Park -----
 Newman Park -----
 Nutrioso -----
 Pacheta -----
 Redstone Trail -----
 Rose Canyon -----
 Silver Creek Divide -----
 Smith Cienega -----
 Snow Bowl #1 -----
 Snow Bowl #2 -----
 State Line -----
 White Horse Lake Junction -----
 White Spar -----
 Whitewater -----
 Williams Ski Run -----
 Willow Ranch -----
 Wilson Lake -----
 Workman Creek -----

SNOW SURVEYOR

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 Forest Service - Douglas Smith
 N. A. Josh
 Forest Service - Chuck Scheier
 Forest Service - Chuck Scheier
 National Park Service - Bob Peterson
 Lyn Pehl
 SCS and SRVWUA
 SCS and SRVWUA
 Forest Service - M. E. Richards
 SCS - Bill Gray
 Forest Service
 Forest Service - Art Maynard
 SCS - Bob Abercrombie
 Bureau of Indian Affairs - Raymond Endfield
 SCS and SRVWUA
 Rocky Mountain Forest & Range Exp. Station
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 Paul G. Lidbeck
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 Air Transit - Show Low
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 Forest Service - Joe Clayton
 Forest Service - Chuck Scheier
 SCS - Bill Gray
 Ray Freeman
 Forest Service - Chuck Scheier
 Tiny Miller
 SCS and SRVWUA
 Rocky Mountain Forest & Range Exp. Station



The Following Organizations Cooperate in the Arizona Snow Survey Work

FEDERAL

Department of Agriculture

Soil Conservation Service

Forest Service

Apache Forest

Canyonino Forest

Colorado Forest

Gila Forest

Kaibab Forest

Prescott Forest

Rocky Mountain Forest and Range Experiment Station

Tonto Forest

Department of Commerce

Weather Bureau

Arizona Section

Department of Interior

Bureau of Reclamation

Region III

Geological Survey

Arizona District

Bureau of Indian Affairs

Fort Apache Reservation

San Carlos Irrigation Project

National Park Service

Grand Canyon National Park

Gila Water Commissioner

Safford, Arizona

STATE

Arizona Agricultural Experiment Station

IRRIGATION PROJECTS

Salt River Valley Water Users' Association

Phoenix, Arizona

San Carlos Irrigation and Drainage District

Coolidge, Arizona

PRIVATE

Southwest Forest Industries, Inc.

McNary, Arizona

Other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

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